REMARKS

Applicants apologize for the confusion in the mis-numbering of the claims in the Preliminary Amendment filed on April 21, 2004. Applicants have canceled claims 43-58 from the Preliminary Amendment, and added new claims 60, 61, and 62-76, which generally correspond to claims 43-58 in the parent application. Applicants have also amended claims 1-3, 5, 6, 9, 10, 25, and 26. Applicants have previously canceled claims 27-42, which are being prosecuted in a related application. Thus, claims 1-26 and 60-76, of which claims 1, 25, 26, 62, and 71 are independent form, are presented for examination. The amendments add no new matter.

35 U.S.C. § 112

Claims 43-50 and 52-58 have been rejected as allegedly indefinite. Applicants have canceled these claims without prejudice, which renders this rejection moot.

35 U.S.C. § 102

Claims 1, 3, 4, 6, 7, 12-14, 43, 45, and 49 have been rejected under 35 U.S.C. §102(b) as allegedly anticipated by EP 993050 A2 (Maruyama). As amended, independent claim 1 recites linking semiconductor particles with a first material different from the particles and comprising a metal.

Maruyama does not describe or suggest linking semiconductor particles with a first material different from the particles and comprising a metal. Instead, Maruyama describes particles that are connected by heating or by film bonding. Maruyama's particles are connected by the same material as the particles themselves and are not connected by a first material different from the particles and comprising a metal, as claimed. Applicants request that the rejection be withdrawn.

Claims 1, 3-8, 11-24, 43-46, and 48-50 are rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,291,763 (Nakamura).

Similar to Maruyama, Nakamura also does not describe or suggest linking semiconductor particles with a first material different from the particles and comprising a metal. Instead, as acknowledged by the Examiner, Nakamura describes particles connected by heating the particles. Nakamura's particles are connected by the same material as the particles themselves and are not connected by a first material different from the particles and comprising a metal, as claimed. Applicants request that the rejection be withdrawn.

Claims 1, 3-8, 11-14, 24, 43, 45-47, 49, and 50 have been rejected under 35 U.S.C. §102(b) as allegedly anticipated by Cao et al., *J. Phys. Chem.*, vol. 99, 17071-17073 (1995) (Cao).

Similar to the cited references discussed above, Cao also does not describe or suggest linking semiconductor particles with a first material different from the particles and comprising a metal. Instead, as acknowledged by the Examiner, Cao describes particles connected by sintering the particles. Cao's particles are connected by the same material as the particles themselves and are not connected by a first material different from the particles and comprising a metal, as claimed. Applicants request that the rejection be withdrawn.

Claims 1-25, 43-46, and 48-50 have been rejected under 35 U.S.C. §102(a) as allegedly anticipated by WO 01/03232. Here, Applicants refer to U.S. Patent No. 6,849,797 (Koyanagi), which appears to be an English equivalent to WO 01/03232.

Similar to the other cited references discussed above, Koyanagi also does not describe or suggest linking semiconductor particles with a first material different from the particles and comprising a metal. Instead, while Koyanagi describes mixing TiO_2 particles with peroxotitanic acid, Koyanagi subsequently heats and decomposes the acid. There is no indication that the peroxotitanic acid links the TiO_2 particles, as claimed. Independent claim 25, which recites contacting a titanium oxide film with titanium alkoxide to cross-link the particles, is also not anticipated by Koyanagi because Koyanagi decomposes the acid, so the particles are not cross-linked. Applicants request that the rejection be withdrawn.

The dependent claims are patentable over the cited references for at least the same reasons that the independent claims are patentable.

35 U.S.C. § 103

Claims 1, 3-8, 11-24, 26, 43-46, 48-50, and 51-58 have been rejected as being unpatentable over Nakamura in view of U.S. Patent No. 5,830,597 (Hoffmann), and claims 1-26, 43-46, and 48-48 have been rejected as being unpatentable over Koyanagi in view of Hoffmann. In particular, Hoffmann was relied on for describing a continuous process.

Hoffmann does not cure the deficiencies of Nakamura or Koyanagi discussed above. For example, Hoffmann does not disclose or suggest linking semiconductor particles with a first material different from the particles, as claimed. Thus, even if the references could be properly combined, which applicants do not concede, the combination would not result in the claimed subject matter. Applicants request that the rejection be withdrawn.

The dependent claims are patentable over the cited references for at least the same reasons that the independent claims are patentable.

Double Patenting

Claims 1-26 and 43-48 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over certain claims in U.S. Applications Nos. 10/165,877; 10/351,260; and 10/918,493.

Applicants do not agree with or acquiesce to these provisional rejections. Regardless, since these rejections are provisional, applicants will address them upon indication that the present claims are allowable. However, if these provisional double patenting rejection are the only rejections remaining in the present application, and if the present application was filed earlier than the cited applications, the Examiner should withdraw this provisional rejection and permit the present application to issue as a patent (*See* MPEP §804I.B, which states, in pertinent part, "If the "provisional" double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the "provisional" double patenting rejection in

the other application(s) into a double patenting rejection at the time the one application issues as a patent.").

New Claims

New claims 60-76 are also patentable over the cited references. For example, the cited references do not disclose or suggest a method of fabricating a photovoltaic cell, including forming a first electrode having semiconductor particles disposed on a flexible substrate, the particles being linked by a first material different from the particles and comprising a metal. Nor do the cited references disclose or suggest a method of fabricating a photovoltaic cell, including forming a first electrode in a continuous process including linking semiconductor particles with a first material having a metal, applying the semiconductor particles onto a flexible first substrate, and applying a polymeric electrolyte onto the first substrate.

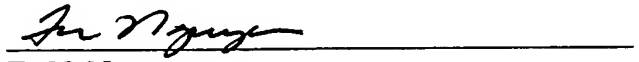
CONCLUSION

For at least the reasons discussed above, Applicants believe the claims are in condition for allowance, which action is requested.

Enclosed is a Petition for Extension of Time with the fee. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney's Docket No. 08688-048002.

Respectfully submitted,

Date: May 10, 2005



Tu N. Nguyen
Reg. No. 42,934

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906